

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED) An electric circuit for an electrical system in a motor vehicle, the electrical system being powered by a voltage supply and having two functional states, the electric circuit comprising:

at least one control stage including a switching device, an electronic switching module, a single signal output, and a single connecting line connecting the signal output to the electrical system;

the switching device including at least one manually operated push-button switching element switchable between two switching states for generating respective switching state output signals at the signal output in order to switch the electrical system between the two functional states;

the electronic switching module including a non-volatile flip-flop formed by EEPROM cells which are operable for storing the switching state of the switching element, wherein the electronic switching module maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system until the switching element is switched to the other switching state, and maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system during an interruption of power from the voltage supply to the electrical system;

the electronic switching module further includes an evaluation stage operable for scanning respective states of the EEPROM cells of the flip-flop;

wherein the evaluation stage includes a test component and a control logic, the control logic including a probability component, wherein the test component is operable for checking the respective states of the EEPROM cells and correspondingly influences the control logic if the respective states of the EEPROM cells are identical, wherein the probability component exercises an influence corresponding to the majority of states if the respective states of the EEPROM cells are not identical.

2. (ORIGINAL) The electric circuit of claim 1 wherein:
the flip-flop includes an odd number of EEPROM cells.

3. (ORIGINAL) The electric circuit of claim 2 wherein:
the flip-flop includes three EEPROM cells.

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6. (ORIGINAL) The electric circuit of claim 1 wherein:
the at least one manually operated push-button switching element includes two manually operated push-button switching elements switchable between two switching states for generating respective switching state output signals at the signal output in order to switch the electrical system between the two functional states.

7. (ORIGINAL) The electric circuit of claim 6 wherein:
the electronic switching module includes first and second inputs which are connected to the voltage supply, wherein the two switching elements are connected between respective inputs of the electronic switching module and the voltage supply such that operation of the first switching element causes the switching state output signal to be "0" at the signal output and operation of the second switching element causes the switching state output signal to be "1" at the signal output.

8. (ORIGINAL) The electric circuit of claim 7 wherein:
the electronic switching module further includes a pair of light-emitting diodes each inserted respectively between the first and second inputs of the electronic switching module and the voltage supply in series with the respective switching elements, wherein the light-emitting diodes emit light when their respective switching element is operated.

9. (ORIGINAL) The electric circuit of claim 8 wherein:
the two light-emitting diodes emit different colored light.

10. (ORIGINAL) The electric circuit of claim 9 wherein:
one of the two light-emitting diodes emits red light and the other of the two light-emitting diodes emits green light.

11. (ORIGINAL) The electric circuit of claim 1 wherein:
a positive pole of the voltage supply is connected to an external voltage input of the electronic switching module via a limiting resistor which limits the transformed dissipation loss in the case of over-voltage.

12. (ORIGINAL) The electric circuit of claim 1 wherein:
an external supply input of the electronic switching module is connected to an internal supply input via an integrated diode which serves as polarity reversal protection.

13. (ORIGINAL) The electric circuit of claim 12 wherein:
a support capacitor connected between the internal supply input and a grounded terminal of the electronic switching module to stabilize the voltage supplied by the voltage supply to the electronic switching module.

14. (CURRENTLY AMENDED) An electric circuit for an electrical system in a motor vehicle, the electrical system being powered by a voltage supply and having two functional states, the electric circuit comprising:

at least one control stage including a switching device, an electronic switching module, a single signal output, and a single connecting line connecting the signal output to the electrical system;

the switching device including two manually operated push-button switching elements switchable between two switching states for generating respective switching state output signals at the signal output in order to switch the electrical system between the two functional states;

the electronic switching module including a non-volatile flip-flop formed by EEPROM cells which are operable for storing the switching state of the switching element,

wherein the electronic switching module maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system until the switching elements are switched to the other switching state, and maintains the switching state output signal corresponding to the stored switching state at the signal output to maintain the functional state of the electrical system during an interruption of power from the voltage supply to the electrical system;

the electronic switching module further includes an evaluation stage operable for scanning respective states of the EEPROM cells of the flip-flop;

wherein the evaluation stage includes a test component and a control logic, the control logic including a probability component, wherein the test component is operable for checking the respective states of the EEPROM cells and correspondingly influences the control logic if the respective states of the EEPROM cells are identical, wherein the probability component exercises an influence corresponding to the majority of states if the respective states of the EEPROM cells are not identical.

15. (CURRENTLY AMENDED) An electric circuit for an electrical system in a motor vehicle and powered by a voltage supply, the electric circuit comprising:

at least one control stage including a switching device, an electronic switching module, a single signal output, and a single connecting line connecting the signal output to the electrical system for switching an appertaining part of the electrical system in one of two functional states;

the switching device including at least one manually operated push-button switching element switchable between two switching states for generating respective switching state output signals at the signal output in order to switch the appertaining part of the electrical system between the two functional states;

the electronic switching module including a non-volatile flip-flop formed by EEPROM cells which are operable for storing the switching state of the switching element, wherein the electronic switching module maintains the switching state of the output signal corresponding to the stored switching state at the signal output to maintain the functional state of the appertaining part of the electrical system until the switching element is switched to the

other switching state, and maintains the switching state of the output signal corresponding to the stored switching state at the signal output to maintain the functional state of the appertaining part of the electrical system during an interruption of power from the voltage supply to the electrical system;

the electronic switching module further includes an evaluation stage operable for scanning respective states of the EEPROM cells of the flip-flop;

the evaluation stage includes a test component and a control logic, the control logic including a probability component, wherein the test component is operable for checking the respective states of the EEPROM cells and correspondingly influences the control logic if the respective states of the EEPROM cells are identical, wherein the probability component exercises an influence corresponding to the majority of states if the respective states of the EEPROM cells are not identical.

16. (ORIGINAL) The electric circuit of claim 15 wherein:

the at least one manually operated push-button switching element includes two manually operated push-button switching elements switchable between two switching states for generating respective switching state output signals at the signal output in order to switch the appertaining part of the electrical system between the two functional states.

17. (ORIGINAL) The electric circuit of claim 16 wherein:

the flip-flop includes an odd number of EEPROM cells.

18. (ORIGINAL) The electric circuit of claim 17 wherein:

the flip-flop includes three EEPROM cells.

19-20. (CANCELLED)